

EXHIBIT F

Today's Research

ENERGY COMMENTARY

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Research at a Glance

Apache Corporation (APA \$37.09 – SP)

Alpine High Natural Gas Production Deferred Due to Pricing

QUICK TAKE: Not unexpectedly, Apache has decided to defer certain natural gas production out of its gas-heavy Alpine High position in the Permian Basin due to extremely low WAHA hub pricing. The move is intended to boost near-term cash flow and currently represents 250 mmcf/d of gross production with deferrals beginning in late-March. The company has said that its expected exit rate from the Alpine High is unchanged for 2019 and that the expected 2019 EBITDA for Altus Midstream is reaffirmed. The planned rig count and well completions in the region are also unchanged, and further details on the impact to 2Q19 are expected to be provided during the 1Q19 earnings release on May 1. Ultimately, while the extremely low gas price environment may be somewhat transitory, we see the wide and volatile WAHA differentials as a reason to avoid APA in the near term.

Rating	SP
1-Yr. Target	\$40.00
EPS18E	\$1.76
EPS19E	\$0.48
EPS20E	\$0.43
Div. (NTM)	\$1.00
Div. (Curr.)	\$1.00
Yield (Curr.)	2.7%
NAVPS	\$39.88

Valuation: Derived from our riskd NAV, including both proven and unproven reserves valued at the SHW price deck assumption

[Link to Full Report](#)

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Halliburton Company (HAL \$31.09 – SP)

1Q19 Earnings Recap – Flat D&E Margins Y/Y?

QUICK TAKE: HAL u/p the OIH by 260 bp despite a beat and raise quarter. 2H US visibility remains a critical debate. Intl revs to grow by high-single digits y/y in 2019 and pricing conversations are constructive. Flat D&E margins y/y in 2019, if achieved, imply upside to consensus estimates. Maintain Sector Perform.

	New	Old
Rating	SP	-
1-Yr. Target	\$33.00	\$31.00
EBITDA (M)19E	\$3,813	\$3,759
EBITDA (M)20E	\$4,272	\$4,151
Div. (NTM)	\$0.00	-
Div. (Curr.)	\$0.00	-
Yield (Curr.)	0.0%	-
Valuation: 8.5x 2020E EBITDA		

[Link to Full Report](#)

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Helix Energy Solutions Group, Inc. (HLX \$8.59 – SO)

1Q19 Earnings First Take - Neutral

QUICK TAKE: HLX reported adj. EBITDA of \$29M, modestly ahead of the \$28M consensus estimate. EBITDA guidance for 2019 was maintained at \$165M-\$190M. With the stock up over 50% YTD, we wonder if results and guidance are enough to drive it higher, given SLB's and HAL's stock reaction? We would be buyers of any weakness.

Rating	SO
1-Yr. Target	\$10.00
EBITDA (M)19E	\$174
EBITDA (M)20E	\$203
Div. (NTM)	\$0.00
Div. (Curr.)	\$0.00
Yield (Curr.)	0.0%
Valuation: 7.0x 2020E EBITDA	

[Link to Full Report](#)

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Natural Gas**Gas Weekly Update – April 22, 2019**

QUICK TAKE: The natural gas data points are less than uplifting as the prompt month hits multi-year lows and the Appalachian Basin witnesses the second consecutive week of basis deterioration, making last week's average differential the worst since mid-October. Production is reaching new highs (the EIA DPR forecasts Permian gains of 1.6% m/m in May), and the first three storage injections have been an astonishing 137 bcf above the five-year average in total. On a positive note, LNG's Sabine Pass facility has completed its maintenance and is ramping back up to full capacity as ~1.5 bcf/d have been offline for ~3.5 weeks. In addition, Cameron has started to take more meaningful volumes of feed gas (105 mmcf/d) as part of the commissioning ramp-up.

Link to Full Report

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Range Resources Corp. (RRC \$9.83 – SO)**Impressive Start**

QUICK TAKE: A strong start to 2019, beating expectations across the board, including generating FCF that was used to reduce leverage. RRC's closely watched 1Q NGL print (nearly 38% of WTI) should give investors confidence that its diversified NGL portfolio is bearing fruit. While 2Q19 production is forecasted below the Street, forward pricing and cost guidance is only likely to result in modest tweaks to consensus. Overall, a good print and FCF above expectations that should drive some near-term outperformance in a name that currently carries an 18% short interest position.

Rating	SO
1-Yr. Target	\$15.00
EBITDA (M)19E	\$1,093
EBITDA (M)20E	\$1,182
Div. (NTM)	\$0.08
Div. (Curr.)	\$0.08
Yield (Curr.)	0.8%

Valuation: Sum-of-the-Parts approach to NAV, less debt

Link to Full Report

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SRC Energy Inc. (SRCI \$6.66 – SO)**1Q19 Update – 18% Oil Beat, FY19 Production Raised 7%**

QUICK TAKE: SRCI pre-announced 1Q19 production 9% above Street expectations with an oilier-than-expected mix (50% vs. the Street at 46%). The combination resulted in 1Q oil volumes beating expectations by 18%. Full year production was also guided 7% higher (we estimate ~32% of the increase was due to strong 1Q volumes) while all other guidance items remained unchanged. The release moves our 1Q19E and 2019E EBITDA estimates 22% and 16% higher, respectively, and our price target also increases to \$9.00/share (from \$7.00 previously). SRCI has admittedly been a strong performer as of late (+37% since 3/27 vs. XOP +8%) but it is still one of the cheapest S-Mid Cap names in our E&P coverage universe (3.5x 2019E EV/EBITDA vs. S-Mid Cap peers at 4.8x) despite its compelling free cash flow outlook (10% 2019E yield vs. peers at -2%) and strong debt-adjusted production growth through 2021E (21% CAGR vs. peers at 15%).

	New	Old
Rating	SO	-
1-Yr. Target	\$9.00	\$7.00
EBITDA (M)18E	\$488	\$480
EBITDA (M)19E	\$591	\$510
EBITDA (M)20E	\$644	\$686
Div. (NTM)	\$0.00	-
Div. (Curr.)	\$0.00	-
Yield (Curr.)	0.0%	-
NAVPS	\$11.02	\$10.71

Valuation: ~4.0x 2020E EV/EBITDA on strip

Link to Full Report

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Pertinent Revision Summary

Target Changes

	New	Old
Halliburton Company (HAL)	↑ \$33.00	\$31.00
SRC Energy Inc. (SRCI)	↑ \$9.00	\$7.00

Pertinent Revisions by Company

Halliburton Company (HAL)

	New	Old
1-Yr. Target	\$33.00	\$31.00
Key Data	EBITDA (M)19E: \$3,813	EBITDA (M)19E: \$3,759
	EBITDA (M)20E: \$4,272	EBITDA (M)20E: \$4,151

SRC Energy Inc. (SRCI)

	New	Old
1-Yr. Target	\$9.00	\$7.00
Key Data	EBITDA (M)18E: \$488	EBITDA (M)18E: \$480
	EBITDA (M)19E: \$591	EBITDA (M)19E: \$510
	EBITDA (M)20E: \$644	EBITDA (M)20E: \$686
NAVPS	\$11.02	\$10.71



Pertinent Data

Apache Corporation (APA)

Valuation:

Derived from our risk-adjusted NAV, including both proven and unproven reserves valued at the SHW price deck assumption

Key Risks:

Oil and natural gas prices, execution risk

Halliburton Company (HAL)

Valuation:

8.5x 2020E EBITDA

Key Risks:

Oil and gas prices, execution risk

Helix Energy Solutions Group, Inc. (HLX)

Valuation:

7.0x 2020E EBITDA

Key Risks:

Oil and gas prices, execution risk

Range Resources Corp. (RRC)

Valuation:

Sum-of-the-Parts approach to NAV, less debt

Key Risks:

Commodity prices, midstream availability, project timing

SRC Energy Inc. (SRCI)

Valuation:

~4.0x 2020E EV/EBITDA on strip

Key Risks:

Oil and natural gas prices, execution risk



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Company	Disclosures (see legend below)*
Apache Corporation	G, I, N1, U

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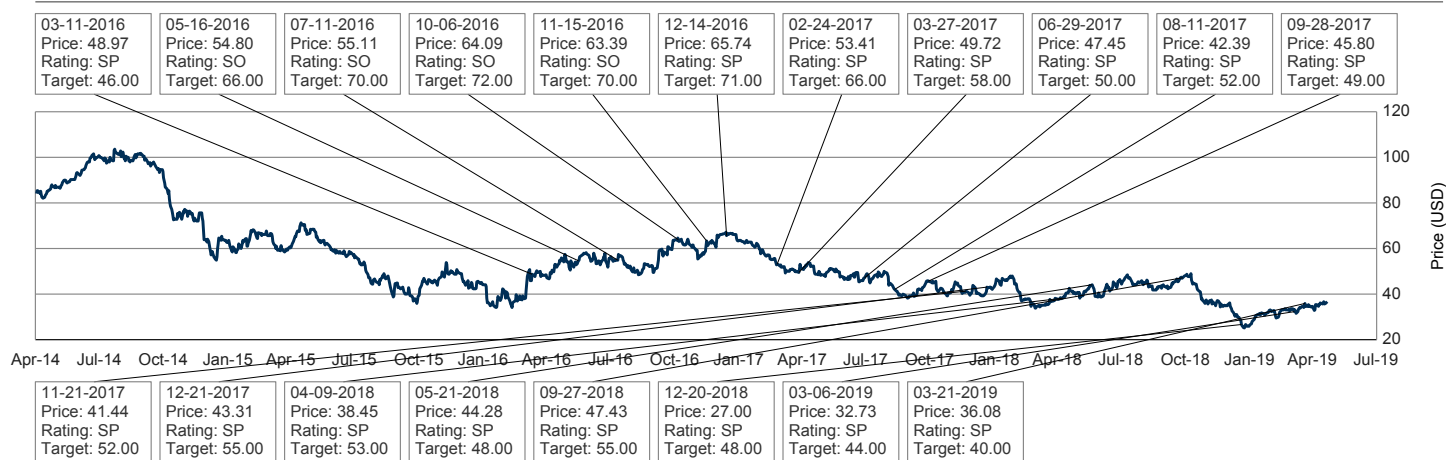


MORNING ENERGY COMMENTARY

Tuesday, April 23, 2019

Rating and Price Target History

Apache Corporation (APA) as of April 22, 2019 (in USD)



*Represents the value(s) that changed.

Ratings Legend: FS=Focus Stock; SO=Sector Outperform; SP=Sector Perform; SU=Sector Underperform; T=Tender; UR=Under Review; CS=Coverage Suspended; DC=Discontinued Coverage

Source: Scotiabank GBM estimates/Scotia Howard Weil estimates; FactSet.

Halliburton Company (HAL) as of April 22, 2019 (in USD)



*Represents the value(s) that changed.

Ratings Legend: FS=Focus Stock; SO=Sector Outperform; SP=Sector Perform; SU=Sector Underperform; T=Tender; UR=Under Review; CS=Coverage Suspended; DC=Discontinued Coverage

Source: Scotiabank GBM estimates/Scotia Howard Weil estimates; FactSet.



Tuesday, April 23, 2019

Helix Energy Solutions Group, Inc. (HLX) as of April 22, 2019 (in USD)

03-05-2019
Price: 7.37
Rating: SO
Target: 10.00



*Represents the value(s) that changed.

Ratings Legend: FS=Focus Stock; SO=Sector Outperform; SP=Sector Perform; SU=Sector Underperform; T=Tender; UR=Under Review; CS=Coverage Suspended; DC=Discontinued Coverage

Source: Scotiabank GBM estimates/Scotia Howard Weil estimates; FactSet.

Range Resources Corp. (RRC) as of April 22, 2019 (in USD)

03-11-2016 Price: 31.11 Rating: SP Target: 31.00	05-02-2016 Price: 43.54 Rating: SP Target: 46.00	07-11-2016 Price: 43.44 Rating: SP Target: 50.00	11-15-2016 Price: 34.69 Rating: SP Target: 48.00	12-14-2016 Price: 34.85 Rating: SO Target: 49.00	03-27-2017 Price: 27.82 Rating: SO Target: 43.00	04-21-2017 Price: 27.47 Rating: SO Target: 44.00	06-29-2017 Price: 23.59 Rating: SO Target: 35.00	08-02-2017 Price: 17.90 Rating: SO Target: 30.00	10-26-2017 Price: 17.72 Rating: SO Target: 28.00	11-21-2017 Price: 17.18 Rating: SO Target: 27.00
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12-21-2017 Price: 16.50 Rating: SO Target: 25.00	03-01-2018 Price: 13.77 Rating: SO Target: 21.00	04-09-2018 Price: 13.93 Rating: SO Target: 19.00	05-23-2018 Price: 15.47 Rating: SO Target: 21.00	09-27-2018 Price: 17.01 Rating: SO Target: 22.00	10-22-2018 Price: 16.70 Rating: SO Target: 21.00	12-20-2018 Price: 10.26 Rating: SO Target: 17.00	02-28-2019 Price: 10.70 Rating: SO Target: 15.00
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Source: Scotiabank GBM estimates/Scotia Howard Weil estimates; FactSet.



MORNING ENERGY COMMENTARY

Tuesday, April 23, 2019

SRC Energy Inc. (SRCI) as of April 22, 2019 (in USD)



*Represents the value(s) that changed.

Ratings Legend: FS=Focus Stock; SO=Sector Outperform; SP=Sector Perform; SU=Sector Underperform; T=Tender; UR=Under Review; CS=Coverage Suspended; DC=Discontinued Coverage

Source: Scotiabank GBM estimates/Scotia Howard Weil estimates; FactSet.



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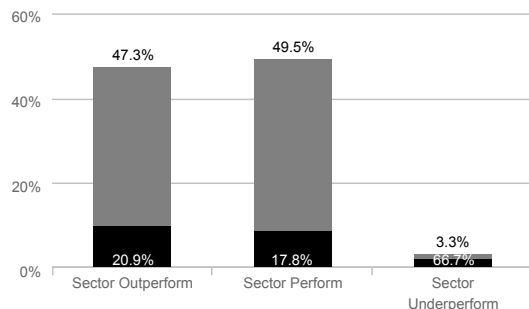
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